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Relationship between Parenting Style and Substance Use Adolescents in Denpasar City

Abstract

Background: Adolescent is a transition period from childhood to adulthood, seeking self-identity, anti-social behavior, violence and substance use. Parenting style is one of the risk factors determining substance use behavior among adolescents to prevent and overcome this behavior's consequences. This study aims to determine the relationship between parenting style toward substance use among adolescents in Denpasar.

Methods: This research is an analytic observational study with a case-control study design. This research sample is adolescent drug users aged 12-25 years who live with their parents aged 0-17 years. The study was carried out in/at the Class IIA Kerobokan Denpasar Prison from August 2020 to September 2020. The data sources are primary data that taken from the PSQ (Parenting Style Questionnaire) and WHO-ASSIST questionnaires. The independent variable is the parenting style, while the dependent variable is the level of substance use. The data were/are analyzed using the chi-square/Fisher exact test with p-value of <0.05 is considered as significant.

Result: The results show that there is a significant relationship between unexpected parenting style according to parents/guardians and drug abuse among adolescents ($r = 0.34$; $p < 0.05$) and that increased the risk of moderate-heavy drug use among adolescents (OR = 5.93; 95% CI = 1.362-25.788; $p = 0.011$).

Conclusions: Unexpected parenting style is associated to/with higher levels of substance use due to guilt, abusive parenting, neglect, which lead to negative self-esteem in children, emotional submission, insecurity and a lack of self-control in children.

Keywords: Adolescents, Drugs, Parenting Style, Substance Abuse, Significant Relationship.

Background

The use of narcotics, psychotropic and other addictive substances is a common concerning issue in Indonesia. This issue is of

concern for it causing physical, psychological and social function problems (Abdullah, 2015). Adolescents are the most susceptible population to drug abuse. Adolescence is a transition period from childhood to adulthood and a period of

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seeking self-identity. Thus they are very sensitive to stress, frustration and conflict, which make them more prone to psychosocial issues. If not handled properly, this could result in anti-social behavior, violence and substance use. According to world drug reports in 2017, over than 275 million people or 5.6% of the world population ranging from 15-64 years old are involved in substance abuse (Benchaya et al., 2019). In Indonesia, it was reported in 2017 that about three million people of age 10-59 years have problems with substance abuse (Berge et al., 2016).

This problematic behavior is influenced by internal and external factors. Parenting style as a part of internal factors is one of the risk factors determining substance use behavior among adolescents (BNN, 2017). It has been suggested that imbalanced parenting style eventually leads to misbehavior such as that of substance use. A deeper understanding of the factors that influence substance use behavior among adolescents is needed in order to prevent and overcome the consequences of this behavior. However, not many studies have been conducted yet in order to understand the matter. This study aims to determine the relationship between parenting style and substance use among adolescents in Denpasar City.

Methods

This study is an analytical observational study with a case-control design of 67 samples. This study aims to determine the relationship between parenting styles and drug use among adolescents in Denpasar city. This study's primary method is a structured interview using the PSQ (Parenting Model Questionnaire) and WHO-ASSIST without any treatment. Participants were chosen at random to find a relationship between the independent variable (parenting style) and the dependent variable

(drug use). The study was conducted in the Class IIA Kerobokan Denpasar Prison, starting from August 2020 to September 2020. The group population was divided into two groups. The first group is adolescents (12-25 years) who using mild levels of drugs, and the second group is adolescents (12-25 years) with moderate-severe levels known from the Class IIA Kerobokan Denpasar Prison. In this study, the inclusion criteria were drug users aged 12-25 years, willing to participate in the study by signing informed consent. The exclusion criteria were parents/guardians refused to participate after receiving an explanation, respondents whose parents/guardians could not be contacted, respondents with physical and mental disorders. Following data on adolescents using the WHO-ASSIST for mild, moderate, and severe drug use, a parental questionnaire was provided to parents and adolescents. After receiving the questionnaire filled in by adolescents and parents, the data was processed for the analysis.

Results

Of the total 67 samples, all were men with an age range of 18 to 25 years and the mean age of the samples was 23 years. More than half of the total sample (62.7%) were senior high school graduates, while the rest were junior high school graduates (28.4%) and elementary school graduates (9.0%). As many as 47.8% were the first children in the family while 52.3% were the youngest children. Five samples did not have siblings and the samples with more than two siblings were 35.8%. About 7.5% of the samples had more than two half-siblings and 79.1% did not have half-siblings in their families. Furthermore, the PSQ questionnaires were mostly filled by the sample's biological parents (73.1%) (See **Table 1**).

Table 1.

Sample Characteristics

No	Variables	N=67
1	Mean age	23 (18-25 years)
2	Gender	
	Male	67 (100.0%)
	Female	0 (0.0%)
3	Education	
	Elementary	6 (9.0%)
	Junior High School	19 (28.4%)
	Senior High School	42 (62.7%)
4	Order of Child in the Family	
	First child	32 (47.8%)
	Second child	17 (25.4%)
	>2	18 (26.9%)
5	Number of Siblings	

	None	5 (7.5%)
	One	15 (22.4%)
	Two	23(34.3%)
	>2	24 (35.8%)
6	Number of Half Siblings	
	None	53(79.1%)
	One	2 (3.0%)
	Two	7 (10.4%)
	>2	5 (7.5%)
7	Parents/Guardians that Filled Up Questionnaires	
	Biological parent	49 (73.1%)
	Grand father	1 (1.5%)
	Sibling	14 (20.9%)
	Half-sibling	3 (4.5%)

In this study, Over 85.1% of the total samples were mild substance users and 14.9% were moderate-severe substance users (See **Table 2**). Based on types of substance used, the most frequently used was alcohol beverages (89.6%) and amphetamine type stimulants

(89.6%), followed by cannabis (44.8%) (See **Table 3**). There were 52.2% that consumed more than three types of substance, while 47.8% used a maximum of three types of substances (See **Table 4**).

Table 2.

Proportion of Substance Use Among the Samples Based on Level of Use

No	Level of Substance Use	N	%
1	Mild	57	85.1
2	Moderate-Severe	10	14.9
	Total	67	100.0

Table 3.

*Number of Samples by the Type of Substance Use**

No	Types of Substance Use	N	%
1	Alcohol	60	89.6
2	Cannabis	30	44.8
3	Cocaine	4	6.0
4	Stimulant of amphetamine type	60	89.6
5	Inhalation	2	3.0
6	Sedativa	13	19.4
7	Hallucinogen	7	10.4
8	Opioid	1	1.5
9	Other substance (Gorilla)	10	14.9

*Substance use can be more than one type of substance

Table 4.

Number of Substance used by the Samples

No	Number of Substance Use	N	%
1	< 3	32	47.8
2	> 3	35	52.2

Based on the parenting styles assessment with PSQ questionnaire which was then divided according to the sample (adolescents) and their parents/guardians, it showed that 40.3% of the parents/guardians felt that they had provided parenting not in accordance with expectations (exposure) and 59.7% felt that they have provided parenting in accordance with

expectations (non exposure) (See **Table 5**). On the other hand, based on the adolescents' assessment themselves, more than half of the total samples (67.2%) felt that they received parenting that was not in line with their expectations (See **Table 6**).

Table 5.

Parenting Style Assessment Result by the Parents/Guardians

No	Parenting Style Assessment	N	%
1	Unexpected parenting style (exposure)	27	40.3
2	Expected parenting style (non exposure)	40	59.7
	Total	67	100.0

Table 6.

Parenting Style Assessment Result by the Adolescents

No	Parenting Style Assessment	N	%
1	Unexpected parenting style (exposure)	45	67.2
2	Expected parenting style (non exposure)	22	32.8
	Total	67	100.0

Referring to the cross tabulation of parenting style on the level of substance use, it was found that most of samples, 19 people, whose parents/guardians felt that they did not provide parenting as expected were mild dependent users (79.2%), while most parents/guardians, 38 people, who felt they had provided the expected parenting also had

children of mild addiction users (95%) (See **Table 7**). Most of the samples who were mild dependent substance users, 36 people, (80%) felt they did not receive the parenting they expected, while almost all those with mild levels of dependence felt that they had gotten parenting as expected (95, 5%) (See **Table 8**).

Table 7.

Distribution of the Level of Substance Use Based on Parenting Style Assessment by the Parents/Guardians

No	Parenting Style Assessment by Parents/Guardians	Level of Substance Use (N)		OR (95%CI)	
		Mild	Moderate-Severe	Mild	Moderate-Severe
1	Unexpected parenting style (exposure)	19 (70.4%)	8 (29.6%)	0.74 (0.574-0.956) ^a	5.93 (1.362-25.788) ^a
2	Expected parenting style (non exposure)	38 (95.0%)	2 (5.0%)		

^aStatistically significant (95%CI)

Table 8.

Distribution of the Level of Substance Use Based on Parenting Style Assessment by the Adolescents

No	Parenting Style Assessment by Adolescents	Level of Substance Use (N)		OR (95%CI)	
		Mild	Moderate-Severe	Mild	Moderate-Severe
1	Unexpected parenting style (exposure)	36 (80.0%)	9 (20.0%)	0.84 (0.706-0.996) ^a	4.4 (0.594-32.579)
2	Expected parenting style (non exposure)	21 (95.5%)	1 (4.5%)		

^aStatistically significant (95%CI)

In this study, the relationship between parenting styles and the level of substance use was determined based on cross tabulation analysis using the Fisher exact method. From the statistical analysis, it was found that parenting style that did not match expectations according to parents/guardians was significantly

related to the level of substance use among adolescents ($r=0.34$; $p<0.05$) (data not shown).

Furthermore, the analysis continued with calculation of odd ratio. It was found that unexpected parenting according to parents/guardians increased the risk of moderate-severe substance dependence among

adolescents by 5.93 times compared to those parents/guardians who felt they had provided parenting that matched expectations (See **Table 7**). On the contrary, parents/guardians who felt they did not provide parenting as expected were 26% lower (OR=0.74) at risk of having a child with mild substance dependence. Moreover, children who felt that they did not receive the parenting as expected were also found to have 16% lower risk (OR=0.84) for experiencing mild substance dependence (See **Table 8**).

The final multivariate analysis was to confirm the influence of other confounding

variables such as age, the order of adolescents as children in the family, education, and the number of siblings and half-siblings. It was found that parenting styles that did not match expectations according to parents/guardians were the only variables that had a significant relationship with the level of substance dependence. Therefore, it indicates that parents/guardians who were not satisfied with their own parenting tended to have children of heavier drug dependence (See **Table 9**).

Table 9.

Multivariate Analysis of Correlation Between Parenting Style and Level of Substance Use Among Adolescents

No	Variables	Exp(B)	95%CI	P Value
1	Unexpected parenting style according to parents/guardians (exposure)	9.02	1.519-53.574 ^a	0.016 ^b
2	Age	1.18	0.764-1.810	0.463
3	Order of child in the family	1.43	0.634-3.240	0.387
4	Education	1.30	0.368-4.580	0.685
5	Number of siblings	0.96	0.471-1.962	0.913
6	Number of half-siblings	1.03	0.594-1.792	0.912

^aStatistically significant (95%CI), ^bStatistically significant with p<0.05

Discussion

This study shows that unexpected parenting is associated with higher levels of substance use. However, this relationship is only significant for the assessment of parenting style by parents/guardians. This is probably due to the invalidity that adolescents tend to come up with while filling up the questionnaires because they have cognitive, emotional, and behavioral issues. The samples could have also been in a state of emotional instability due to the influence of the substances use, so that the results obtained were not as significant (Fatimah et al., 2021; Ismail, 2015).

The results of this study are consistent with the research on the relationship between parenting styles and substance use in XII grade students at the Ma'Arif Education Foundation Trosobo Sidoarjo East Java, Indonesia. This study proves that unexpected parenting including authoritarian and permissive parenting is significantly associated with higher levels of substance use. On the other hand, the expected parenting style is significantly associated with lower substance use ((Berge et al., 2016).). Other research conducted at Cipinang Narcotics Class II A Prison stated that unwanted parenting

in the form of neglect is the cause of adolescents to abuse drugs (Ennett et al., 2016; Faridah & Ery, 2018). Another study that had similar results was a prospective study of 99 adolescents in Brazil. This study states that undesirable parenting style as the most parenting pattern among adolescent of drug users (Jehani & Antoro, 2006; Kembaren, 2014). A cohort study of 1268 adolescents in Sweden stated that permissive parenting was significantly associated with drug abuse cases (Kurtieva et al., 2021; Merz, 2018).

Reasons why parenting style is associated with substance use can be due to negative self-concept, depression, attention seeking, or lack of supervision. Unwanted parenting such as constantly blaming the child, refusing to support the child and saying negative things to the child can result in negative self-concepts such as feeling insecure, unworthy, and unloved. Thus when growing up into an adolescent, they become more prone to such misbehaviour of drug abuse. When they have low self-esteem, drugs or substance use becomes an acceptable deed for them to relieve stress.

Undesirable or unexpected parenting by the adolescents, such as parents who tend to be authoritarian, can also cause children to feel

depressed because they are constantly scolded, restrained, and even experience physical violence. When they feel depressed, they will seek outlets for negative things such as that of drug abuse. Undesirable parenting styles for children can also be a cause of neurotic symptoms that leads to a pathological reason for drug abuse (Parolin et al., 2016; Putri et al., 2021).

Unwanted parenting in the form of a lack of parental role in adolescent life can also influence substance use rates. This can be due to various factors, one of which is seeking attention to the surrounding environment. Moreover, The sense of responsibility in adolescents is still low, so they can think careless enough and do anything they want. A neglected also forms an immature personality in adolescents that they are more susceptible to misbehavior of substance use (Nyandra & Suryasa, 2018).

Adolescents with the appropriate or desirable parenting style usually come with the lower level of substance use. This could possibly due to parental guidance that establishes good self-control, parental supervision that creates less opportunity for deviant actions, and lower stress levels in adolescents. The desired parenting style, such as giving praise when the child does something positive, supports the child, provides warmth and comfort result in a positive self-conception in an individual. The children will feel that they are valuable so they will have more responsibility of themselves and do not commit to such deviant actions (Ningsih et al., 2021).

The data from this study were taken based on the PSQ questionnaire to assess parenting styles, and the WHO-ASSIST questionnaire to assess the level of drug use. The questionnaires have passed the validity and reliability tests. In the WHO-ASSIST questionnaire, validity tests were carried out on 1047 subjects spread across 7 countries in various parts of the world, with the results of the questionnaire considered valid. For the PSQ questionnaire, the value of the correlation coefficient on each question item is higher than the product moment correlation price, so the questionnaire is declared valid (Sodikin, 2017; Humeniuk & Ali, 2006). Regarding reliability, the WHO-ASSIST questionnaire has carried out two reliability tests where the first stage was carried out in 9 countries and stage 2 was carried out in 10 countries in various parts of the world, with the results of WHO-ASSIST having good reliability (Willis, 2012). The PSQ questionnaire has the Cronbach Alpha score of > 0.7 , thus the questionnaire is also said to be reliable (Nyandra et al., 2018).

Limitation of this study is the use of questionnaire that assesses parenting styles since childhood which allows for recall bias because the samples; both parents and

adolescents could possibly not remember exactly the parenting patterns that was given in the past. In addition, the samples of this study were taken at a service, which handled patients who had been diagnosed with substance use, so it did not include all adolescents in Denpasar who did not go to the services. Interviews with parents/guardians cannot be carried out in depth due to communication barriers, namely being unable to conduct interviews directly due to pandemic conditions.

Conclusion

We found that all of the male adolescents in this study were mostly drug users, and most felt they lacked style parenting in line with their expectations. On the other hand, parents/guardians value the parenting style they offer their children as intended. Uncover the link between parenting styles and drug use in Denpasar, where parenting styles that do not meet parents/guardian expectations are associated with higher drug use levels, mostly moderate to severe drug use. It can be based on guilt, abusive parenting, or neglect, leading to negative self-esteem in children, emotional submission, insecurity and a lack of self-control in children. Further research is proposed: Continuation of research on the practical definition of paternity based on expectations, as this study evaluates the subjective opinions of adolescents themselves and their parent/guardian. Therefore, according to a specific test's criteria, there is no objective evaluation, whether the parenting style is exquisite or not. Besides, other factors can influence the relationship between parenting styles and the prevalence of substance use to determine whether individual parenting styles are the most appropriate for reducing the likelihood of juvenile delinquency, and particularly substance use. It is also suggested to request samples from two or more locations in the next study so that the results are more representative of the target group.

Ethical Statement

This study has been approved by Ethical Commission of Faculty of Medicine, Udayana University with the letter number: 1805/UN14.2.2.VII.14/LT/2020.

Author Contribution

All writers cited have contributed in all of the research progress including preparation, data collection and data analysis, as well as drafting and approval of the script issuance.

Conflict of Interest

There is no conflict of interest regarding the publication of this article.

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